In attendance:

Agency Chairs: Anne Carroll (DCR), Glenn Haas (DEP), Mark Tisa (DFG) for Jack Buckley, Committee Members: Ralph Abele (EPA), Colin Apse (Nature Conservancy), Sue Beede (Mass Rivers Alliance), Tom Cambareri (Cape Cod Commission), Doug DeNatale (AECOM), Eric Hooper (Town of Sharon), Dave Kaplan (Cambridge Water Dept.), Kerry Mackin (Ipswich River Watershed Association), Cary Parsons (Woodard & Curran), Nigel Pickering (Charles River Watershed Association), Brian Wick (Cape Cod Cranberry Growers' Association), Viki Zoltay (ABT Assoc.), Peter Weiskel (USGS)

Other Attendees: Deb Albenberg, Cambridge Water Dept.), Kathy Baskin (EEA), Julia Blatt (Mass Rivers Alliance), Sarah Brant (USGS), John Clarkeson (EEA), Sara Cohen (DCR), Charlie Cooper (TRC), Karen Crocker (DEP), Rebecca Cutting (DEP), Jeff Davis (UMass Donahue Institute), Lexi Dewey (WSCAC), Jacqueline Daoust (DEP), Jen D'Urso (DEP), Lucy Edmondson (DEP), Richard Friend (DEP), David Glater, (Trout Unlimited), Linda Hutchins (DCR), Steve Kaiser (ANC Contr.), Audrey Lamb (EEA), Tom Lamonte (DEP), Duane LeVangie (DEP), Beth McCann (DEP), Marilyn McCrory, (DCR), Peter Newton (SEA), Jennifer Pederson (MWWA), Tim Purinton (DFW), Vandana Rao (EEA), Todd Richards (DFW), Peter Shelley (CLF), Marcia Sherman (DEP), Peg Stolfa (DEP), Margaret Van Deusen (CRWA), Dave Armstrong (USGS)

Meeting Objectives:

- Continue discussions on safe yield/streamflow categorization methodologies
- Develop a preferred recommendation on a categorization method
- Provide an opportunity for questions and answers on the newly available USGS reports

Items of Agreement:

• Recommend to the Advisory Committee that 1% impervious cover (IC) be the statewide baseline when determining categories, with additional items to be reviewed.

Parking Lot Issues

• Regarding the USGS Fish and Flow Study, and using this as a base for categorization: The species that vary in western Massachusetts streams are not normally common in streams in eastern Massachusetts. How does that skew the model? How can we use the actual figures from the sub-basins in determining categories rather than the broad brush of the model? Is this step necessary for basic categorization?

Revised Categorization Draft Results

Presentation – Stream Categorization by Todd Richards, Massachusetts Division of Fish and Wildlife See the web postings for July 13 at::

 $\frac{\text{http://www.mass.gov/?pageID=eoeeaterminal\&L=5\&L0=Home\&L1=Air\%\,2c+Water+\%\,26+Climate+Change\&L2=Preserving+Water+Resources\&L3=Sustainable+Water+Management&L4=Sustainable+Water+Management+Technical+SubCommittee\&sid=Eoeea\&b=terminalcontent&f=eea_swm_tech_subcomm_resources&csid=Eoeea$

Pilot basins analysis has now been completed

- Discussion of impervious surface was heated and detailed during the pilot study workgroup's discussions
- It is clear there will be many Category 5 subbasins no matter how we approach impervious cover
 - o the question is how will we deal with those

Going Forward

1

Slope Calculation for the subbasins that were not included in the pilot studies

• 976 subbasins are done with about 400 to go *See slide presentation*

Impervious Cover Baseline (IC)

• A baseline value is needed in a small urbanized state to "avoid pre-colonial stigma"

<u>Pilot Workgroup Results - 2</u> alternatives for the IC baseline

- 1. 1% statewide
 - pros-
 - it is simple
 - comparable statewide
 - respresents least altered
 - cons
 - lots of Category 5's

2. up to 3 % depending on lowest subbasin within a basin

- pros
 - increases the # of high class subbasins
- cons -
 - basin impacts and current state are not comparable statewide
 - complex
 - doesn't represent the least altered conditions

The Chair proposes that the Technical Advisory Committee should

- recommend to the Advisory Committee that 1% impervious cover (IC) be the statewide baseline
- notify the Advisory Committee that the Technical Committee continues to work to resolve its concerns about "Category 5" in the current categorization scheme
 - o There is continued concern about the large number of Category 5 subbasins
 - The Tech Com would like to further examine dividing Category 5 into subgroups based biological loss as August flow decreases.
- Category groupings will be reviewed. Some members wished to reaffirm that the category breakpoints
 have sufficient biological basis. An ad-hoc Fish Workgroup will meet to discuss this further prior to the
 next Technical Subcommittee meeting. Questions to be reviewed include:
 - o How many categories should there be? 5? 7?
 - Putting Category 5 at 50% alteration of fish community is that the best cut-off?

After discussion there was general consensus regarding the 1% impervious cover as a statewide baseline for analysis, with the understanding that the Fish Workgroup would meet to reaffirm the general category groupings.

<u>USGS Report: Preliminary factors influencing revirine fish communities in Massachusetts</u> (Discussion, Q & A)

- Many participated in the discussion, both on the Technical Subcommittee and the audience.
 Respondents to the questions were Peter Weiskel (USGS), David Armstrong (USGS), Sara Brandt (USGS) and Todd Richards (MA-DFG).
- The discussion centered around some key themes:
- The actual difference in fish species in eastern Massachusetts versus western Massachusetts. Is there a better way to account for this through the model? Does this hamper the results from the model?
- Many of the category designations are driven by impervious cover.
- Category groupings: Are the dividing lines between categories related to biological indicators or some other standard?
- The model is to be utilized as a screening tool. Site specific analysis is still very beneficial.
- Data availability: The Massachusetts Indicators Appendices, available on line, provide all the data for the variables used in the study. (See http://pubs.usgs.gov/sir/2009/5272/)
- How could impact of surface waters be incorporated?

Safe Yield Response to Comments (this discussion was tabled until the next meeting).

Ipswich Basin Permits

DEP will issue renewed permits by August 31, 2010

- Exploring options for issuing permit under an interim determination of safe yield
- Wants to ensure that the safe Yield used in Ipswich permit renewals will not different from the safe yield developed for all other basins during the coming fall

Wrap-Up & Agenda Planning for July

Committee members should notify EEA if they want to be on the Fish Workgroup. This group that will examine:

- break points between stream categories along the regression equation line (i.e., where should one category end and the next begin) and
- regression analyses for fish found or expected in eastern Massachusetts

Notify EEA if you are interested by July 27th

Tentative volunteers: Nigel Pickering, Colin Apse, Charlie Cooper, Ralph Abele, Eric Hooper, Nathan Henderson, Tom Lamonte

For the next Technical Subcommittee meeting

- Provide the scope for the USGS 2011 full Fish and Habitat Study
- Provide clarification about whether and how Category 5 subbasins meet designated uses under the Clean Water Act

Upcoming meeting schedule:

Technical Subcommittee – August 10 2010, 100 Cambridge Street – 2nd Floor, 10:00 AM to 1:00 PM Advisory Committee – July 27 2010, 100 Cambridge Street5 – 2nd Floor, 1:00 PM to 3:30 PM Fish Workgroup – July 28 2010, DEP at 1 Winter Street, 9:30 AM to noon.

